

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

DYNAENERGETICS EUROPE GMBH, and
DYNAENERGETICS US, INC.,

Plaintiffs,

v.

GR ENERGY SERVICES OPERATING GP LLC,
GR ENERGY SERVICES MANAGEMENT, LP,
and GR ENERGY SERVICES, LLC

Defendant.

Civil Action No: 6:21-cv-00085-ADA

**DYNAENERGETICS EUROPE GMBH AND DYNAENERGETICS US, INC.'S
RESPONSIVE CLAIM CONSTRUCTION BRIEF**

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Pursuant to the Proposed Scheduling Order (Dkt. 34) and the Standing Order Governing Patent Case (Dkt. 36), Plaintiffs DynaEnergetics Europe GmbH and DynaEnergetics US, Inc. (collectively, “DynaEnergetics”) submit this Responsive Claim Construction Brief in support of their proposed construction for a disputed term of the asserted patent as well as addressing terms that Defendants GR Energy Services Operating GP LLC, GR Energy Services Management, LP, and GR Energy Services, LLC (collectively, “GR Energy”) have proposed for construction.

I. STATEMENT OF THE ISSUES AND SUMMARY OF THE ARGUMENT

Before the Court are five terms from U.S. Patent No. 10,844,697 (the “’697 Patent”) that have been proposed for construction (one by DynaEnergetics, five by GR Energy):

- “first end” / “second end”
- “pin connector”
- “connected to”
- “in electoral communication with”
- “it is not possible to interrupt the electrical signal from the first pin connector end to the second pin connector end”

Claim construction in this matter is straightforward. With one exception, each of the terms listed above has a well-understood meaning in the art which the jury will readily understand. As a result, most terms of the ’697 Patent do not require construction. Nevertheless, GR Energy and the other Defendants in the related ’697 Patent cases¹ have each identified between four and seven terms for construction, and—despite obvious coordination—the Defendants cannot agree on whether certain terms need construction; nor can they agree on what the majority of the terms mean. Rather, each Defendant appears to have approached claim construction largely with the structure and operation of their own accused systems in mind, purposefully choosing purported

¹ *DynaEnergetics Europe GmbH v. G&H Diversified Mfg., LP*, No. 6:20-cv-01110-ADA (W.D. Tex.); *DynaEnergetics Europe GmbH v. Horizontal Wireline Servs., LLC*, No. 6:21-cv-00349-ADA (W.D. Tex.); *DynaEnergetics Europe GmbH v. NexTier Oilfield Sols., Inc.*, No. 6:21-cv-01201-ADA (W.D. Tex.); *DynaEnergetics Europe GmbH v. PerfX Wireline Services, LLC*, No. 6:21-cv-00371-ADA (W.D. Tex.).

synonyms, incorporating unnecessary or unsupported verbiage, or rewriting the plain language of the claims. Defendants' tailored approaches forces DynaEnergetics to submit multiple claim construction briefs for the same patent, including five separate briefs in this District alone. To simplify this process, however, DynaEnergetics attaches as Exhibit A a chart of all proffered constructions as proposed by each WDTX Defendant.

However, each Defendant—including GR Energy—has followed a similar claim construction strategy to narrow the claims of the '697 Patent by proposing constructions that violate well-established claim construction principles and rewriting the claims in a way that introduces ambiguity or imports limitations from the specification. GR Energy's proposed constructions disregard the express claim language and the intrinsic record—ostensibly to manufacture otherwise non-existent non-infringement positions. DynaEnergetics respectfully requests that the Court reject GR Energy's proposed constructions and adopt the plain and ordinary meaning of each of these five disputed terms.

With respect to the disputed term “connected to,” when read in the context of the '697 Patent, a person of ordinary skill in the art would understand that the plain and ordinary meaning of the term “connected to” requires that the connected elements be “joined or coupled in a manner that resists separation and not merely by physical contact.” DynaEnergetics respectfully requests that, should the Court find a construction is necessary, the Court adopt this construction.

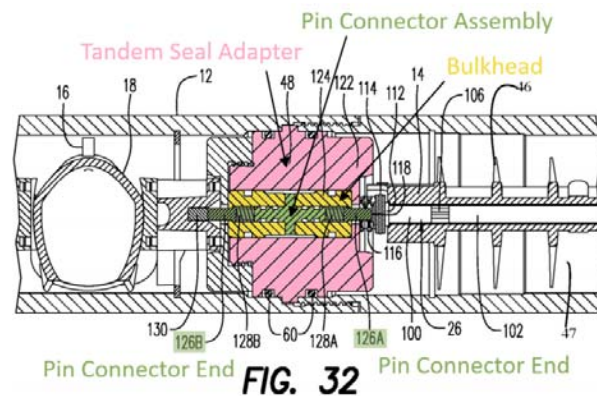
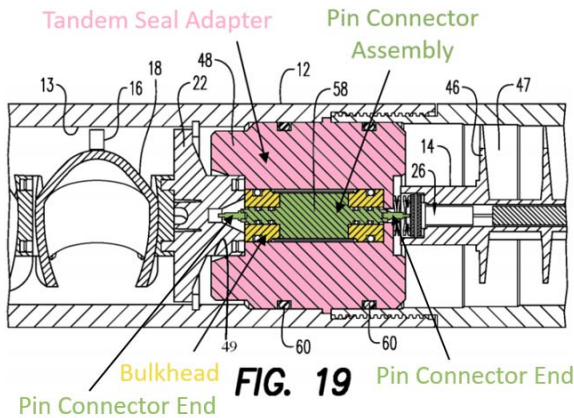
II. BACKGROUND

The inventors of the '697 Patent solved the problems and limitations found with conventional perforation guns to enable “pre-wired,” factory-assembled perforation guns that do not require on-site assembly of internal components or wiring of electrical and/or ballistic connections. These new and improved perforating gun systems contain contactable electrical feedthrough connections (as opposed to wired connections) that replace the wiring and crimping

between successive perforating guns in a string that was used in the prior art conventional systems. Rodgers Decl. ¶¶ 33-35. This invention, therefore, reduces labor costs, eliminates much of the possibility for human error inherent in conventional systems, and greatly reduces the risk of inadvertent ignition or detonation. *Id.* ¶ 35.

The '697 Patent is generally directed to improvements to a perforation gun and methods of assembly thereof in the oil and gas perforating industry. '697 Patent at 1:24-29. In particular, the patent is focused on an electrical connection assembly for establishing Plug and Go™ electrical connections through and between guns in a tool string. The benefits of the invention claimed in the '697 Patent include providing factory-assembled, modular components and simplifying assembly and electrical/ballistic connectivity of perforating gun strings at a wellbore site to enhance reliability, efficiency, and safety. *See* Rodgers Decl. ¶ 37.

Specifically, the '697 Patent claims a tandem seal adapter ("TSA"), pressure bulkhead, and a pin connector assembly which includes electrical pin connector ends. *See* '697 Patent at claim 1; *see also id.* at 7:58-8:8, 8:31-42. The pressure bulkhead of the '697 Patent is claimed as sealingly received within a bore in the TSA, and together the TSA and pressure bulkhead provide a pressure seal (achieved here by O-rings) between successive perforation guns. Where the conventional gun systems included ported tandem subs through which manually wired connections were made, the inventive electrical connection assembly claimed in the '697 Patent provides for a pin connector assembly housed in a pressure bulkhead and tandem seal adapter that passes the electrical signal between guns, which achieves a safe, reliable, and effective establishment of an electrical feedthrough connection along the gun string without wired connections between guns. Rodgers Decl. ¶¶ 42-45. Annotated Figures 19 and 32 below illustrate two exemplary, non-limiting embodiments of the '697 Patent. *See id.* ¶¶ 39-40.



The benefits of the invention claimed in the '697 Patent relate directly to the replacement of the required manual wiring of conventional systems with the pin connector assembly housed in a pressure bulkhead and TSA, which automatically makes an electrical connection by contact when the TSA is connected to a perforation gun outer gun carrier. Benefits include simplifying assembly and arming of perforation gun strings at a wellsite, as well as enhancing reliability, efficiency, and safety. These advancements described in the '697 Patent enable a substantial leap forward in the technology available in the oilfield providing operators with cost savings and reliability improvements. Rodgers Decl. ¶ 45.

III. LEGAL STANDARD

“[T]he claim construction inquiry . . . begins and ends in all cases with the actual words of the claim.” *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1324 (Fed. Cir. 2002) (citation omitted). Claim terms “are generally given their ordinary and customary meaning,” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (citations omitted). Courts “depart from the plain and ordinary meaning of claim terms based on the specification in only two instances: lexicography and disavowal.” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014). However, “[t]he standards for finding lexicography

and disavowal are exacting.” *Id.* “To act as its own lexicographer, a patentee must clearly set forth a definition of the disputed claim term other than its plain and ordinary meaning and must clearly express an intent to redefine the term.” *Id.* (citations and quotations omitted). Similarly, “[d]isavowal requires that the specification [or prosecution history] make[] clear that the invention does not include a particular feature, or is clearly limited to a particular form of the invention.” *Id.* at 1372 (quotations and citations omitted).

Claim construction begins with the intrinsic evidence, which includes the words of the claims themselves, the specification, and the prosecution history. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582-83 (Fed. Cir. 1996). The Federal Circuit has noted that “[i]n most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term.” *Id.* at 1583. In these cases, “it is improper to rely on extrinsic evidence.” *Id.* In fact, courts should generally view extrinsic evidence “as less reliable than the patent and its prosecution history.” *Phillips*, 415 F.3d at 1318.

IV. DISPUTED TERMS

As set forth in Exhibit A, a total of nine terms of the ’697 Patent are in dispute between all of the WDTX Defendants. However, GR Energy specifically has proposed five terms for construction, and each of those terms is discussed in turn below. DynaEnergetics respectfully submits that all but one of the terms at issue do not require construction, but are instead entitled to their plain and ordinary meanings because they are well understood terms. GR Energy’s proposed constructions, however, impermissibly seek to change the meaning and scope of the asserted claims by importing limitations from the specification or prosecution history, excluding disclosed embodiments, and wholly disregarding the express claim language and the intrinsic record, thereby violating the bedrock principles of claim construction set forth above. Therefore, GR Energy’s proposed interpretations should be rejected. DynaEnergetics further submits that the plain and

ordinary meaning of the term “connected to” would be understood by a POSITA to have a specific meaning within the context of the ’697 Patent and should, therefore, be construed as proposed by DynaEnergetics below.

A. “first end” / “second end” (asserted claim 1)

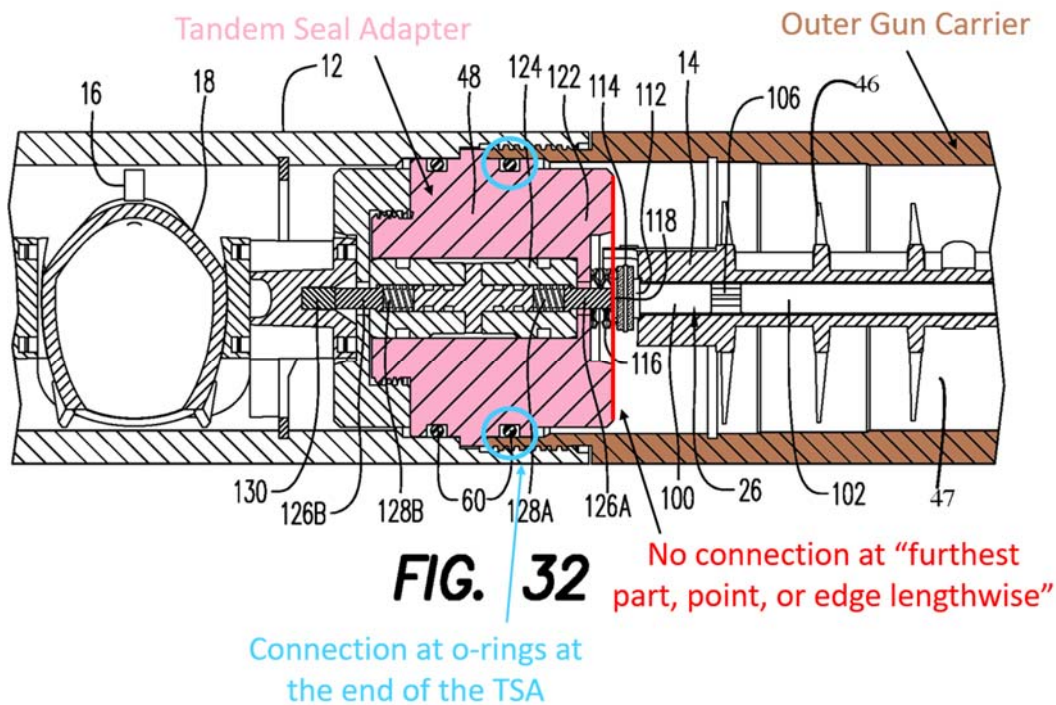
DynaEnergetics’ Construction	GR Energy’s Construction
No construction needed; plain and ordinary meaning	“first furthest part, point, or edge lengthwise” / “second furthest part, point, or edge lengthwise”

In the ’697 Patent, the meaning of “end”² is clear on its face, and the dispositive intrinsic record supports the reasonable, plain and ordinary reading of the term “end” to refer to a region or portion of a component that is toward one lengthwise edge, and includes such an edge, but that is not limited to such an edge. *See* Rodgers Decl. ¶¶ 76-78. There is simply no ambiguity in “end” that warrants departure from its ordinary and customary meaning; the patentees did not act as a lexicographer to set forth any special definition of “end,” nor did they engage in any disavowal specifically regarding the term “end.” Thus, the ordinary and customary meaning of “end” controls, and no further construction is needed. *See Phillips*, 415 F.3d at 1314 (“In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.”).

In contrast, GR Energy’s proposed construction for “end” is not only unnecessary but nonsensical. The ’697 Patent claims require that the first outer gun carrier be “connected to the **first end** of the tandem seal adapter.” ’697 Patent at 11:28-29 (emphasis added). For a gun carrier to be connected to an end of the tandem seal adapter, a POSITA would understand that the “end”

² For simplicity, DynaEnergetics omits the words “first” and “second” and discusses the claim term “end” with the portion of GR Energy’s proposed construction, “furthest part, point, or edge lengthwise.”

must encompass more than the “furthest part, point, or edge lengthwise.” *See* Rodgers Decl. ¶¶ 78-79. An outer gun carrier could not be connected to an “furthest part, point, or edge”—essentially a point or a 2-D plane at the terminal edge—of the tandem seal adapter. This is illustrated in the preferred embodiment disclosed in, e.g., FIG. 32, where the connection between the tandem seal adapter and the outer gun carrier does not take place on the first “furthest part, point, or edge lengthwise” on the right—it takes place on the first end where the seal connects the tandem seal adapter to the outer gun carrier.



'697 Patent at FIG. 32 (annotated). Accordingly, a POSITA would readily understand that the “end” of the tandem seal adapter would encompass the full region in which the connection takes place—up to and including the furthest part, point, or edge—and is not limited to *only* the “furthest part, point, or edge lengthwise.” *See* Rodgers Decl. ¶ 80. GR Energy’s proposed construction not only excludes this preferred embodiment, but all of the disclosed embodiments from the scope of the claimed invention, because none of the embodiments disclose a connection between the outer

gun carrier and the “furthest part, point, or edge lengthwise” of the TSA under GR Energy’s construction. *See SynQor, Inc. v. Artesyn Techs., Inc.*, 709 F.3d 1365, 1378-79 (Fed. Cir. 2013) (“A claim construction that excludes the preferred embodiment is rarely, if ever, correct and would require highly persuasive evidentiary support.”) (quotations and citations omitted).

Undeterred by this incompatibility, GR Energy seeks this formal construction of the term “end” in order to narrow the overall scope of the claimed invention to suit its litigation strategy. In an attempt to find intrinsic support for its incompatible construction, GR Energy points to the claim limitation that requires the bore in the tandem seal adapter to extend “from the first end to the second end,” but ignores the fact that its proposed construction would make the immediately succeeding words, “entirely through the tandem seal adapter,” superfluous. *See Becton, Dickinson & Co. v. Tyco Healthcare Grp.*, 616 F.3d 1249, 1257 (Fed. Cir. 2010) (rejecting claim construction that would render claim language superfluous). GR Energy makes the same argument for the claim limitation that requires the pin connector assembly to relay an electrical signal from the “first end” to the “second end” of the pressure bulkhead, but its construction would write out of the claim the limitation that the pin connector assembly must “extend[] through” the pressure bulkhead. Rodgers Decl. ¶¶ 81-82. Furthermore, while GR Energy attempts to draw focus on the use of the words “half” and “side” in the specification to narrow the definition of the word “end,” GR Energy makes no attempt to address how its proposed construction is incompatible with the limitation that requires a connection between the outer gun carrier and the “ends” of the TSA. In addition, GR Energy’s cherry-picked dictionary definitions and expert testimony is similarly inconsistent with the plain language of the claims, and should be afforded no weight. *See Vitronics Corp.*, 90 F.3d at 1584. Thus, despite GR Energy’s best efforts to find support, there is no evidence in the intrinsic record that actually supports GR Energy’s limitation of the word “end” to **only** the “furthest part,

point, or edge lengthwise” as GR Energy suggests—much less provide the “highly persuasive evidentiary support” needed for a claim construction that excludes a preferred embodiment. *SynQor*, 709 F.3d at 1379; *see also* Rodgers Decl. ¶¶ 77-80.

Finally, the addition of the adjective “furthest” immediately after the terms “first” and “second” adds needless confusion, because referring to the first and second furthest parts could refer to elements on the same end of the TSA. Rodgers Decl. ¶ 77. For example, the “first furthest” point could be closest to (or at) the edge and the “second furthest” point could be just slightly less far than the “first furthest” point. *Id.* Using the terms “first end” and “second end” clearly refers to opposing ends or regions of the tandem seal adapter, as one of skill would readily understand. Accordingly, no construction is needed for this term.

B. “pin connector” (asserted claim 1)

DynaEnergetics’ Construction	GR Energy’s Construction
No construction needed; plain and ordinary meaning	“rigid male electrical contact”

The term “pin connector” is readily understood when read in the context of the claims, and it requires no construction. Rodgers Decl. ¶¶ 118-19. Notably, GR Energy is the only Defendant that has proposed this term for construction—none of the other Defendants have taken a position on the term “pin connector” and understand that it requires no construction. In contrast, GR Energy’s proposed construction merely adds a new and unfounded limitation that appears nowhere in the claims, has no support in the patent, and should be rejected.

GR Energy’s use of the gendered term, “male,” adds an unsubstantiated limitation that the pin connector must be part of a mated pair—otherwise, the inclusion of a gender to the description of the pin connector is entirely superfluous. Rodgers Decl. ¶¶ 120-21. As GR Energy explains, the designation of a connector as “male” implies that there is corresponding “female” receptacle that

receives the “male” connector. Dkt. 39 at 8, 11; *see* Rodgers Decl. ¶¶ 120-21. GR Energy incredibly stretches the use of the terms “socket” and “pin” with respect to a locking, mechanical connection between modular components bottom connector to the electrically connecting “pin connector” that the claims recite. Contrary to GR Energy’s assertion, the term “pin” is not generally used to describe generalize that all “pins” must be a “male” piece with a corresponding “female” receptacle. For example, FIGS. 19 and 32 of the ’697 Patent illustrate an electrical pin connector, as claimed, that does not require a female/socket connection, despite the fact that nothing in the language of the patent supports this reading. GR Energy’s reliance on the extrinsic evidence for this term further illustrates how its proposed construction is completely outside of the claimed “pin connector” that the ’697 Patent illustrates and describes.

GR Energy attempts to contort the prosecution history to find support for its construction by pointing to the limitation “wherein the first pin connector end extends beyond the first end of the pressure bulkhead and the second pin connector end extends beyond the second end of the pressure bulkhead” that was added during the prosecution history. However, simply because the pin connector must “extend beyond” the ends of the pressure bulkhead does not mean that it specifically must be part of a mated pair. Therefore, there is nothing approaching prosecution history disclaimer that could support GR Energy’s tortured proposed construction.

Accordingly, the Court should reject GR Energy’s incorrect construction for “pin connector.” No construction is needed for the term “pin connector” because a POSITA would have understood the plain and ordinary meaning of the “pin connector” in the context of the ’697 Patent. *See* Rodgers Decl. ¶ 119.

C. “in electrical communication with” (asserted claims 1 and 10)

DynaEnergetics’ Construction	GR Energy’s Construction
No construction needed; plain and ordinary meaning	“receiving information by electric signal”

The ’697 Patent uses the term “in electrical communication with” in claim 1 (where the relevant portions of the claim states: “...the first detonator is *in electrical communication with* the pin connector assembly...” (emphasis added) and claim 10 (where the relevant portions of the claim states: “...the bulkhead connector element is *in electrical communication with* a second detonator...” (emphasis added)). A POSITA reading this claim language would understand that the plain and ordinary meaning of components that are “in electrical communication with” each other simply means that there is an ability for an electrical signal to be transferred between components. *See* Rodgers Decl. ¶¶ 125-28. In contrast, GR Energy’s proposed construction for “in electrical communication with” again unduly narrows the claims in a way that is not supported by the ’697 Patent. Neither the claims nor specification of the ’697 Patent limit the “electrical communication” to “receiving information by electrical signal.”

GR Energy again misconstrues the prosecution history in an attempt to find support for its incorrect construction. The amendment changing a detonator “configured *to receive* the electrical signal from the pressure bulkhead,” to a detonator “*in electrical communication* with the pin connector assembly” actually supports that the “in electrical communication with” was intended to cover a broader action than receiving the electrical signal, from the claimed pin connector assembly. Ex. F, Feb. 12, 2020 Reply to Office Action at 9-10. As GR Energy pointed out (Dkt. 39 at 13), claim 10 (a dependent claim of claim 1) was also amended from “a first contact pin that is *in electrical contact with* a signal in connector element of the detonator” to “bulkhead connector element is *in electrical communication with* a second detonator positioned within the second outer

gun carrier.” Ex. G, June 26, 2020 Notice of Allowability at 4-5 (on the Notice of Allowability, the current version of claim 10 was listed as claim 9) (emphasis added). This amendment is also consistent with “electrical communication” covering more than merely receiving information by electrical signal.

Furthermore, the proposed construction is unduly narrow because it indicates that there must be a direction to the electrical communication, wherein the second component in electrical communication apparently must transmit “information by electrical signal” that the first component directly “receives.” There is no support for this directional limitation in the claims or specification of the ’697 Patent. Rodgers Decl. ¶ 130. Furthermore, a POSITA would understand that the proposed directional requirement for the term “in electrical communication with” does not make sense in the context of the ’697 Patent claims. For example, GR Energy’s proposed construction would not make sense for claim 10 because it would require that the bulkhead connector element is “receiving information by electrical signal” from a second detonator. However, a POSITA would understand it would be nonsensical to assume that the second detonator would send an electrical signal for the bulkhead connector to receive. In addition, the ’697 Patent explicitly specifies when a direction is required by the claim language. For example, in claim 1, the claim includes a description of a pin connector assembly that is “configured to relay an electrical signal from the first end of the pressure bulkhead to the second end of the pressure bulkhead” Accordingly, GR Energy’s construction is not supported by the claim language of the ’697 Patent.

D. “connected to” (asserted claim 1)

DynaEnergetics’ Construction	GR Energy’s Construction
Plain and ordinary meaning, which is “joined or coupled to, in a manner that resists separation and not merely by physical contact”	“joined or coupled together”

Though claims are given their ordinary and customary meaning, they must be construed “as understood by a [POSITA] . . . when read in the context of the specification and prosecution history.” *Laryngeal Mask Co. v. Ambu A/S*, 618 F.3d 1367, 1370 (Fed. Cir. 2010). Here, a POSITA would understand that, consistent with the industry usage of the term, the term “connected to” as used in the claims of the ’697 Patent means “joined or coupled in a manner that resists separation and not merely by physical contact.” See Rodgers Decl. ¶ 71-72; *Callicrate v. Wadsworth Mfg., Inc.*, 427 F.3d 1361, 1366-67 (Fed. Cir. 2005) (“Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.”) (quoting *Vitronics Corp.*, 427 F.3d at 1367-68).

While “connected to” may appear readily understandable, it is important in the context of the ’697 Patent claims to expressly define this term as requiring a secure coupling or joining together. The claimed connection can be achieved by threading and/or o-rings to provide a firm and secure connection between the tandem seal adapter and the outer gun carrier. See Rodgers Decl. ¶ 72. In contrast, a mere touching or fitting together or physical contact alone would not be sufficient for two components to be “connected to” each other as claimed in the ’697 Patent because there would be no secure resistance to separation. *Id.* ¶ 71.

While GR Energy needlessly complicates DynaEnergetics’ proposed construction by attempting to further construe and define the phrases “resists separation” and “not merely by physical contact,” a POSITA would easily understand from the context and plain language of the

'697 Patent how a connection would resist separation not just from physical contact. Demonstrating this required resistance to separation, the term “connected to” is used in claim 1 to describe the relationship between the tandem seal adapter (discussed above) and a “first outer gun carrier.” '697 Patent at 11:24-29. Claim 1 also requires the tandem seal adapter to be “configured to provide a seal between the detonator and an environment on the second end of the tandem seal adapter.” *Id.* at 11:44-47. Accordingly, a POSITA would understand that the claimed tandem seal adapter is “connected to” the first outer gun carrier in a manner that is sufficiently secure as to provide a seal between an interior of the first outer gun carrier (*i.e.*, as recited by claim 1, “the first detonator [is] positioned within the first outer gun carrier”) and the second end of the tandem seal adapter.

However, a POSITA would also understand that a firm and secure connection between the tandem seal adapter and the outer gun carrier could be achieved by multiple different methods (e.g., with the use of threading, o-ring seals, etc.). *See* Rodgers Decl. ¶ 72. For example, a POSITA would clearly understand that a threaded connection between two components would resist separation through the use of interlocking threads, and therefore would be appropriately “connected to” each other. *Id.* Accordingly, in the context of the '697 Patent, a POSITA would understand the term “connected to” to mean “joined or coupled in a manner that resists separation and not merely by physical contact.”

E. “it is not possible to interrupt the electrical signal from the first pin connector end to the second pin connector end” (asserted claim 2)

DynaEnergetics' Construction	GR Energy's Construction
No construction needed; plain and ordinary meaning	Indefinite

GR Energy does not offer a proposed construction for this phrase and instead alleges that it is indefinite. Claims viewed in light of the specification and prosecution history, must “inform

those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). This standard “mandates clarity, while recognizing that absolute precision is unattainable.” *Id.* at 910. Indefiniteness must be proven by clear and convincing evidence. *Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017). GR Energy cannot meet this burden.

Functional terms, such as the above-claimed phrase, are not inherently indefinite. *Nevro Corp. v. Bos. Sci. Corp.*, 955 F.3d 35, 39 (Fed. Cir. 2020). In fact, the Federal Circuit has held that “functional language can promote[] definiteness because it helps bound the scope of the claims by specifying the operations that the [claimed invention] must undertake.” *Id.* (internal quotations and citations omitted). When a claim limitation is defined in “purely functional terms,” a determination of whether the limitation is sufficiently definite is “highly dependent on context (e.g., the disclosure in the specification and the knowledge of a person of ordinary skill in the relevant art area).” *Id.* (citation omitted). The materials, assembly, and electrical concepts disclosed in the ’697 Patent, in addition to the common knowledge in the industry, provide “a general guideline and examples sufficient to enable a person of ordinary skill in the art to determine the scope of the claims.” *Id.* (citation omitted); *see also* Rodgers Decl. ¶¶ 99-105, 107-08.

As discussed in Background above (Section II), an important and novel aspect of the claimed invention includes the short, stiff pin connector assembly claimed by the ’697 Patent that is superior to the prior art teachings of wires that are vulnerable to cutting, crimping, or other damage. In addition, the ’697 Patent also discloses that the pin connector assembly is protected by a pressure bulkhead and a portless tandem seal adapter that does not include internal wired connections that may be prone to damage, disconnection, or wiring mistakes. *See* Rodgers Decl. ¶¶ 100-05; *see also* ’697 Patent at 11:18-47. Thus, the portless tandem seal adapter prohibits access

to the pressure bulkhead and pin connector assembly that are “sealingly received” within the tandem seal adapter. *See* Rodgers Decl. ¶¶ 100-05; *see also* ’697 Patent at 6:13-15, 6:28-38. Accordingly, with the context of the relevant industry knowledge, a POSITA would recognize that the improvements taught by the ’697 Patent provide reasonable certainty about the claimed inventions’ scope—which is that it would not be possible to interrupt the electrical signal from the first pin connector end to the second pin connector end in the same manner one could with wired connections, due to the portless tandem seal adapter that does not allow access to the pressure bulkhead and pin connector assembly. *See* Rodgers Decl. ¶¶ 107-08.

Furthermore, the prosecution history supports that a POSITA would be able to readily understand and determine the scope of this claim term. In an office action, the examiner alleged that the pin connector assembly disclosed in the Schacherer reference met the claim limitation “wherein it is not possible to interrupt the electrical signal . . . from the first end [] to the second end [] of the pressure bulkhead.” Ex. E, Nov. 12, 2019 Office Action, at 4. While the patentee eventually overcame this objection, the examiner was clearly able to recognize the definite scope of the functional limitation, “it is not possible to interrupt the electrical signal,” evidencing that a POSITA would understand the teaching in the ’697 Patent as providing the proper basis and scope for the limitation “it is not possible to interrupt the electrical signal.” Accordingly, the limitation is enabled and not indefinite.

V. CONCLUSION

For the reasons set forth herein, DynaEnergetics respectfully requests that the Court reject GR Energy’s proposed constructions and adopt DynaEnergetics’ proposed constructions.

Dated: November 8, 2021

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CERTIFICATE OF SERVICE

I hereby certify that on November 8, 2021, I electronically filed the foregoing document with the Clerk of the Court using the CM/ECF system, which will send notification of such filing *via* electronic mail to all counsel of record.

/s/Eric H. Findlay

Eric H. Findlay